

We claim:-

1. A process for coating a substrate, wherein a finely divided  
5 suspension of crystalline oxide particles is applied to a  
substrate by coating, the suspending medium is evaporated  
and the coating on the substrate is sintered.
2. A process for coating a substrate as claimed in claim 1,  
10 wherein oxide particles having a mean particle size of from  
0.5 to 9.9 nm are used.
3. A process for coating a substrate as claimed in either of  
claims 1 and 2, wherein the oxide particles used are  $\text{BaTiO}_3$ ,  
15  $\text{SrTiO}_3$ ,  $\text{Ba}_x \text{Sr}_{1-x} \text{TiO}_3$  where  $x = 0.01$  to  $0.99$ ,  $\text{Pb}(\text{Zr}_x \text{Ti}_{1-x})$   
 $\text{O}_3$  where  $x = 0.01$  to  $0.99$  or  $\text{Sr Bi}_2 \text{Ta}_2 \text{O}_9$ .
4. A process for coating a substrate as claimed in any of  
claims 1, 2 and 3, wherein the suspending medium used is an  
20 alcohol or a glycol ether.

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